REMARKS

Previously, claims 1-10 were pending. After applicant has reviewed the non-final office action from the examiner, claims 1-5, 7, 9, and 10 are amended and claims 6, 8 remain the same.

In response to the examiner's comments in the office action, first, the applicant regards this invention as a single screen form for entry and display of patient, medical, and financial information during a visit to a physician's office. The software of the single screen then relays the collected information to the appropriate processes, such as demographics, medical diagnosis, prescriptions, laboratory tests, billing, and scheduling among others. In use, a doctor enters information upon the single screen in real time while examining a patient. The software behind the single screen then processes the information with minimal further employee involvement.

Second, the examiner noted rejections for indefiniteness and lack of antecedent basis. Claims 2-5, 7, 9, and 10 have been amended to read more definitely and with basis. Pursuant to MPEP 2111.03 "including" is viewed as open ended similar to "comprising" thus new steps in a method can be introduced in dependent claims as done here by the Applicant. However, Applicant has amended references to the definite article "the" with the indefinite article "a" to overcome the examiner's listed objections.

Third, the patent to Crane, No. 5,748,907, was cited as anticipatory to the application. The '907 patent describes a master processor and subsidiary systems and rooms for a medical or other professional facility. Crane's patent automates a patient visit from the initial phone call to collection of the final bill and the steps in between. The master processor coordinates information and facilities using input from the subsidiary systems. The '907 patent further describes a communications room where the master processor connects to outside services, databases, and networks. The '907 patent also explains about a coordinator room, col. 11, where an employee talks with a patient regarding the present appointment and schedules a follow up appointment.

In contrast generally, the present invention provides a single page digital form for a doctor to complete when examining a patient, essentially automating the recordkeeping in the examination room. The digital form collects the demographic, medical, and financial information to record, document, and bill for the examination. The form feeds information into the software of the present invention for further processing and communication with outside providers. The form does not seek to manage a facility, inventory, employees, or vendors. Rather the form automates the information collection and processing to generate a bill to the patient. Unlike in Crane, the present invention does not have a room. Reference to the single page of the digital form is available in the specification at page 2 line 12, page 6 lines 12, 17, page 8 lines 12, 13, and page 9 line 15.

In contrast specifically regarding claim 7, Crane col. 5, lines 47-52 and 60-65 describe a medical facility management system. Though Crane schedules appointments, those appointments are compared to the load in the medical facility implying logic that adjusts appointments based on demand within the medical facility. The present invention schedules the patient's next appointment based on the return of test results or end of an observation period calculated from the diagnosis. The present invention does not check appointments against demand for them or facilities. Crane does disclose a hospital business management system however, the present invention merely seeks to automate information collection and simplicity in the exam room as stated in the including clause of claim 7.

Though Crane receives various inputs into its system, those inputs are heavily sensed. Crane mentions sensed ID cards among other things, col. 9, lines 29-45 and col. 24, lines 47-54 and a checkout window with a coordinator employee who talks with departing patients. In contrast, the present invention does not sense inputs but rather has the doctor enter codes himself upon the single page digital form. Applicant interprets "sensed" to mean that Crane's system can read ID cards and other information automatically, such as by a bar code. In the present invention, information is collected from the patient in person

and then entered by the doctor during the examination. Crane uses a separate coordinator employee and room to arrange a next appointment while the present invention schedules the next appointment on the same page as the information collected during the examination.

In contrast specifically regarding claim 7, Crane col. 5, lines 37-42, col. 7, lines 5-12, and Table 2, describes a management system that generates invoices for insurance companies or other payors along with on-line information transmission. Those are broad goals for many management systems whether medical or otherwise. Crane does not address how the invoices are generated. On the other hand, the present invention collects financial information from the patient at the time of examination. And further, Crane's Table 2 arises from a simulation contrasting a manual paper based system with an automated digital system. The present invention does not rely upon simulations to prove its management of information collected in an examination room.

And in contrast specifically regarding claim 7, Crane col. 11, lines 49-53, col. 5 lines 37-42, and col. 34 lines 62-65, describes a clinic architectural design including a communications room and a coordinator room. The communications room provides space for telecommunications equipment of many kinds that establishes communication between the clinic and outside providers. The coordinator room provides space for an employee to interface with a patient regarding the present visit and future appointments. Crane also mentions removal of an ID card that triggers the master processor to generate an invoice. On the other hand, the present invention does not have rooms but rather a digital single page form with sections for a doctor to complete during an examination. The information on the single page form is then processed upon a server by pressing the SAVE button. The server sends the information on the form to medical, management, and financial software subroutines among others for further processing. The present invention allows the doctor to plan and schedule a patient's next visit right upon the single page form in an examination room. As previously described, the present invention fosters doctor and patient interaction

during an examination and does not use sensing of ID cards or other tracking mechanisms suitable for large facilities such as a hospital.

The applicant asserts that Crane manages a hospital or other large medical facility by an automated tracking system using ID cards and other sensed markers. Crane's system performs many tasks that most businesses seek to automate to lower their expenses. However, the present invention collects medical, demographic, and financial information upon a single page by the doctor while examining the patient. The present invention automates information collection and processing where the medical service is delivered, the examination room.

This application as amended withstands the prior art as cited by the examiner, whether the prior art be applied individually, or in combination, for use anticipating the claimed subject matter of the applicant's invention.

Fourth, the patent to Crane, No. 5,748,907, was cited as rendering the application as an obvious variant upon a prior patent. Crane discloses an automated management system for a hospital or large medical facility. Inherent in management, many records are created by the different employees and managers in a facility. Further, even patients themselves may complete forms. The records vary in content and format thus presenting an information management challenge. The present invention though streamlines and organizes information collection where the doctor and patient interact.

In contrast specifically regarding CLAIMS 1 and 8, Crane col. 2, lines 59-61, and col. 9 lines 40-45 describes patients completing demographic and historical forms when in the waiting room and then how Crane's system outputs information collected on those forms. The present invention though has the doctor collect information from the patient during an examination. The doctor then enters the information upon a single page digital form. Applicant asserts that collecting and organizing medical, demographic, and financial information upon a single page digital form is not obvious given the number of functions and data for a typical medical visit.

Then Crane, col. 1, lines 36-38 and col. 2, lines 59-61 describes the present intake process for patients arriving for an appointment with a doctor. Filling out forms as in Crane likely implies patients with pen in hand. But the present invention has a digital form completed by a doctor while examining the patient.

Then Crane, col. 9, lines 29-35 describes real time inputs sensed, presumably detected, from other machines and cards. The sensed inputs then feed into the master processor. Crane's real time inputs come from various locations and sources in a medical facility. Meanwhile, the present invention collects medical information by the doctor in the examination room in the presence of the patient. The present invention does not collect information remotely through sensing.

Then Crane, col. 9, lines 29-35 and lines 40-45 describes real time inputs as above and conditional outputs broadly. The outputs include patient history, insurer invoice, visit summary, and appointment schedule as well as employee duty roster, inventory, and profit and loss statement for a medical facility. Crane's outputs exceed patient visit management and expand to include employee scheduling and management reports for an entire medical facility. The present invention though focuses upon the doctor documenting an examination of a patient with a digital record beside him in the examination room. The present invention does not address management reports for a medical facility.

Then Crane, col. 5, lines 37-42 describes automatic verification and invoicing of insurance companies. Examiner asserted that verification and invoicing were interpreted as calculation. The Applicant counters that verification implies a bill was created that requires checking prior to sending as an invoice to an insurer for payment. A bill is created by converting the activities of the doctor examining the patient into billable events and then assigning a dollar value to the event. The present invention aligns the doctor's notes of activities during a patient examination with the fees charged for each activity. The present invention then calculates a bill from the fees accumulated during an examination.

Then Crane, col. 9, lines 29-35 and lines 40-45 describes real time inputs and conditional outputs as above and diagnosis and prescription information. Crane appears to collect discrete results from a doctor. A diagnosis identifies the condition and likely remedies for a specific condition. A prescription is one remedy for a condition and likely the predominant one. Crane likely tracks the prescription because of its cost and likely delivery in a hospital or other pharmacy. The present invention on the other hand, records the doctor's notes from an examination of a patient that lead to a diagnosis. That diagnosis then has applicable treatments that may include pharmaceuticals among other remedies. In claiming treatment, the present invention records remedies for a patient beyond just pharmacological.

Then Crane, col. 23, lines 44-51 describes a checkout window where departing patients meet with the coordinator employee. The coordinator reviews a printed visit summary with the patient. The summary includes the status of the invoice to the patient's insurer. In contrast, the present invention does not rely upon a coordinator and provides the dollar amount owed by the patient and the patient's insurer.

Then again, Crane, col. 34, lines 59-65 describes a checkout window where patients departing a pharmacy meet with the coordinator to review a summary of the visit. The visit summary is compiled by the master processor and then printed in the coordinator room. The master processor uses accumulated information to print the summary but does not expressly store the information for later use after the visit is concluded. In contrast, the present invention stores both the medical history of the visit and the financial obligations of the patient and the insurer for use after a visit.

Crane teaches of an automated system to manage a large medical enterprise. That system has rooms and pieces of computer hardware coordinated by software but not a simple record for a doctor to complete during an examination. A single page record produced by the present invention is not taught by Crane as the number of functions and data streams managed by Crane

defies use of a single page. Examiner asserts that conservation of resources, as in paper, would motivate modifying Crane into a single page format. Applicant counters that the costs incurred in re-programming Crane into a single page format would far exceed the savings in paper.

This application as amended withstands the prior art as cited by the examiner, whether the prior art be applied individually, or in combination, for use rendering obvious the claimed subject matter of the applicant's invention. The patent to Crane does not teach of software displaying on a single page what a doctor should check during an examination of a patient. Rather Crane teaches of a management system to run an entire hospital, a much larger enterprise than the present invention. Thus, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some suggestion, or incentive supporting that combination.

In contrast specifically regarding CLAIM 2, Crane, col. 5, lines 37-42 describes automatic invoicing of insurance companies by a communications link upon conclusion of services being rendered. However, the present invention sends the financial obligation in a form desired by a payor and not necessarily just an invoice. Further the present invention transmits information through a network while Crane uses a link. A network implies a web of communication connections while a link implies a single connection.

In contrast specifically regarding CLAIM 3, Crane, col. 23, lines 1-11, col. 9 lines 29-35, and Table 1 describes a diagnostic meeting of a nurse and a patient where the nurse questions the patient. The patient's answers inform the nurse as to the test and physician needed. However, the present invention allows a doctor to record the words used by a patient to describe a symptom. The doctor records the description while examining the patient but not while querying the patient. And as before, the present invention records the doctor's notes from an examination of a patient that lead to a diagnosis. That diagnosis then has applicable treatments such as pharmaceuticals, among other remedies. Further, Table 1 in Crane shows the results from a simulation of using the Crane

management system. In contrast, the present invention has been used in physician offices subject to actual conditions and demands.

In contrast specifically regarding CLAIM 4, Crane, Table 2 and col. 5, lines 37-42, describes automatic invoicing of insurance companies upon conclusion of services being rendered. However, the present invention goes further than Crane and itemizes the components of a financial obligation which may result in an invoice. In real time and displayed on the single page digital form, the present invention provides the bill for an examination and treatment, any payments towards that bill, and any remaining balance on the bill.

In contrast specifically regarding CLAIM 5, Crane, col. 2 line 62 to col. 3 line 6 and col. 4 lines 41-47 describes the prior art of repeated visits to a doctor's office and pharmacy to fulfill a prescription and for monitoring by the doctor. The present invention provides an address of any outside provider utilized during or following a patient examination.

In contrast specifically regarding CLAIM 6, Crane, col. 34, lines 59-65 and col. 29 lines 48-51 shows a master processor with billing and medical information stored in a long term memory and creation of a summary using the DONE function. Crane, col. 29 lines 37-47 also shows additional tests that can be selected by browsing through menus. The present invention though places medical, diagnostic, and financial information upon one record that appears as a single screen digital form. The record is then placed into a database by pressing a SAVE button. SAVE implies information is kept while DONE of Crane implies a session is completed and has no reference to information keeping.

In contrast specifically regarding CLAIM 8, Crane teaches of an automated system to manage a large medical enterprise that has similar objects and functions as the present invention. Crane's system has pieces of computer hardware coordinated by software to track inventory, employees, patient flow, and third party vendors among other things for a hospital, but not a single screen record for a doctor to complete during an examination. A single page record produced by the present invention is not taught by Crane as the number of

functions, people, and equipment managed by Crane eclipses a single page in using multiple menus. The Examiner asserts that conservation of resources, as in paper, would motivate modifying Crane into a single page format. Applicant counters that the costs incurred in re-programming Crane into a single page format would far exceed the savings in paper.

In contrast specifically regarding CLAIM 9, Crane, col. 19 line 64 to col. 20 line 7 shows a cost file maintained for pharmaceuticals and tests ordered through the Master Processor. The cost file is organized by a coding scheme. As prescriptions and test results flow through the Master Processor, the cost file is queried and a charge assessed for each prescription and test. In contrast, the present invention uses the information recorded by the doctor during the examination of a patient to determine the appropriate billing codes. As the doctor compiles and then dictates a report of the examination, the present invention has simultaneously calculated a bill for the examination.

In contrast specifically regarding CLAIM 10, Crane, col. 23, lines 44-51 and col. 29, line 50-51 describes a checkout window where departing patients meet with the coordinator employee. The coordinator reviews a printed visit summary with the patient. The summary includes the status of the invoice to the patient's insurer. The coordinator may then use the DONE or other assigned function keys to end the record of a patient visit. However, Crane does not show the diagnosis on the visit summary as done by the present invention. The present invention allows a doctor to record diagnostic notes and arrange for treatment upon a single page form. Upon completing the form, the present invention converts the doctor's notes into test orders, prescriptions, and a bill among other things that derive from a patient examination.

This application as amended withstands the prior art as cited by the examiner, whether the prior art be applied individually, or in combination, for use either anticipating or rendering obvious the claimed subject matter of the applicant's invention. The patent to Crane teaches of automating the management of a hospital and the information of all kinds created therein. Crane

does not teach of a single page digital form that a doctor uses during examination of a patient. Crane does not teach of the information collected by the doctor flowing into other systems to request further services and to generate a bill. Thus, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some suggestion, or incentive supporting that combination. See *Ex parte Beuther*, 71 USPQ2 1313, (Bd. Pat. App. & Int. 2003) and *In re Geiger*, 815 F2d. 686 (Fed. Cir. 1987).

The applicant has been informed of the patent to Lowrey et al., No. 6,374,229 that may bear on the present invention. A supplemental IDS is enclosed regarding the Lowrey patent. The Lowrey patent describes collection of data from and about patients. That data is then stored and manipulated on a secure database accessible via the Internet to subscribers. This is not the present invention that captures information during a doctor's examination of a patient and processes that information into service requests and bills. The present invention lacks a remote database and subscription access.

This application, in view of the foregoing amendments and remarks, is believed to be in condition for allowance. Favorable action by the examiner is respectfully requested.

Respectfully Submitted,

Paul M. Denk
Attorney for Applicant
Pat. Off. Reg. No. 22,598
763 South New Ballas Road
St. Louis, MO 63141
(314)872-8136